

# Search for Weaknesses With Psychological Tests

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An in-depth interview with a prominent industrial psychologist  
sheds new light on the role of employee  
testing despite EEO and possible discrimination charges

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*OVER the past few months, numerous questions from readers came into our offices about the pros and cons of psychological testing. Some companies that formerly relied heavily on testing to aid them in their selection processes and later curtailed their programs due to the assumption that they were open to discrimination charges, are now users of testing again.*

*To assist you in evaluating the role of psychological testing in your organization, Jim Bruno, managing editor of Administrative Management, interviewed Dr. Arthur A. Witkin, chief psychologist for the Personnel Sciences Center of New York and an associate professor of psychology at Queens College, City University of New York. In the past 20 years, Dr. Witkin's firm has helped management select 50,000 employees for hiring or promotion while counseling 10,000 others on career pathing.*

**A/M:** Interest in psychological testing is increasing markedly. Why, after years of a "hands-off" attitude, is management once again looking towards testing?

**WITKIN:** The cost of hiring the wrong person is increasing. One industrial company estimates it takes \$8,000 to train each worker. The dollars lost from faulty hiring decisions are incalculable. At the same time, increasing numbers of minorities and women without experience are entering the work force. Due to their lack of

**A/M:** What about equal employment opportunity (EEO) complaints? Hasn't management believed that psychological testing would lead to claims of discrimination?

**WITKIN:** Part of the reason management steered clear of testing was the common assumption that it would lead to legal difficulties. In fact, the Equal Employment Opportunity Commission (EEOC) never intended that tests not be used. "It's a common misconception that the fastest way to get into trouble with the commission's staff psychologist, Dr. James Sharf, has said.



Three years ago he predicted that testing could recover ground when companies came to a halt. He predicted that hasty recruiting of minority and female employees would not meet either their own needs or the equal opportunity requirements. That time has come. Some authorities believe that testing is the only selection procedure that has proven valid.

Indeed, the interviewing and reference check phases of employee selection are conducted with far looser standards than testing is. One study showed that more tall applicants for sales jobs survive the interviewing process than short applicants do because of interviewers' bias. And anyone who has tried to gather reliable information from previous employers who fear to say anything negative knows how unproductive reference checks can be.

Companies that relied heavily on testing and later curtailed their testing due to the mistaken assumption that they were more open to discrimination charges, now are heavy users of testing again. The Federal

government's new *Uniform Guidelines on Employee Selection Procedures* testing. Rather, the government seeks to prevent any discriminatory hiring procedure. A seat-of-the-pants approach that seems even-handed is vulnerable to challenge as well.

*A/M: In addition to aiding management in making hiring decisions, are psychological tests also used to help management decide whom to promote?*

**WITKIN:** Rensselaer Polytechnic Institute's School of Management has created a management development system that searches for weaknesses (or as the testing community says, "searches for the derogatory") in a candidate for promotion. The system separates management functions that can be developed by training from those that cannot. Managers with weaknesses in nontrainable areas are not promoted. A spokesman for Colt Industries Inc., which uses the system, says "We are

learning to look more at what a candidate for promotion does not have."

*A/M: Just how reliable are psychological tests in predicting an employee's future success or failure?*

**WITKIN:** Today, management is rejecting the Peter Principle; they are refusing to promote a person beyond his or her level of competency. Instead, management wants scientific predictors of performance to aid them in making promotion decisions. More and more, testing is improving management's ability to promote the right people. This is because the reliability of testing has increased markedly, and there are fewer instances of misusing tests than there were in the past. In addition, industrial psychologists have developed more reliable tests, and new methods of validating their results.

*A/M: What will psychological tests tell an employer about an employee?*

**WITKIN:** Managers not familiar with testing often are surprised to learn the wide range of ability and personality characteristics that can be measured. The list of these characteristics, or dimensions of thought and personality, is impressive. They include analytical ability, understanding of people, sales sense, detail-handling, emotional stamina, self-reliance, energy level, sociability, and self-confidence, to give a few examples.

*A/M: How do you determine which personality factors are relevant to the job?*

**WITKIN:** Successful psychological testing must include a careful analysis of this question. An industrial psychologist can identify the factors and develop scoring ranges once he becomes familiar with the job. Another approach is to have the psychologist administer psychological tests to all the persons successfully performing that job and draw a profile of the ideal applicant from those results.

Going back to your question about what psychological tests will tell an employer, many managers are shocked to learn that high scores in intelligence, aggressiveness and ability may actually be a detriment, depending on the job. Simi-



*Managing editor, Jim Bruno (left), asking Dr. Arthur Witkin how he determines which personality factors are relevant to a particular job.*

lary, managers may stress factors like loyalty, likability, and conscientiousness when, in fact, they are liabilities. A "loyal" employee tends to "go by the book" rather than seek innovative solutions to problems. A "conscientious" employee can be counted on to tie all loose ends together, but he might not be able to reorganize the work for greater efficiency. An employee who overvalues his likability might hesitate to make unpopular decisions. Fortunately, psychologists avoid emphasizing these storybook characteristics and rely instead on factors that are relevant to the job.

**A/M:** At the beginning of this interview you mentioned that "managers with weaknesses in nontrainable areas are not promoted." What is considered trainable?

**WITKIN:** More skills can be improved by training than is generally believed. MOHR Development Inc., of Stamford, Conn., has found the behavior modeling method of training effective in such diverse applications as making supervisors better people handlers, teaching purchasing agents to deal more effectively with suppliers, teaching managers goal setting techniques, and training line employees to handle over-demanding staff executives. However, I caution management not to make any unwarranted assumptions about which management functions can or cannot be developed by training.

**A/M:** What do you consider to be the most important part of the employee selection procedure?

**WITKIN:** Industrial psychologists are often asked to identify the most important part of the selection procedure: application blank, interview, psychological testing, or reference check. The proper answer is that none of these is the most important, per se. The most important is the one that eliminates the candidate. In other words, the one that identifies an important weakness.

Many factors contribute to success on the job, but one by itself can lead to failure. It is harder to learn if the applicant has the characteristics for success than if he has those for failure. A sound psychological testing program identifies weaknesses. If the selection pro-

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**'Many factors contribute to success but one by itself can lead to failure'**



*A prospective employee taking a "forced choice" test for a sales position.*

cedure has not yielded anything negative, the employer should not hire because something has probably been overlooked.

**A/M:** Can you give an example of how knowledge of a person's derogatory characteristics will aid in the hiring or promoting process?

**WITKIN:** It is important to understand what negative factors are the most important. When choosing salesmen, for example, employers should understand that 85 percent of failures are due to personality and motivation factors, not to abilities.

Employers are recognizing that test results provide far more than guidance on whether or not to hire an applicant. Properly structured, testing yields valuable data on how to develop the employee if he is hired, including the weaknesses to watch for. As an example, test results may indicate the applicant has a high level of forcefulness but lacks understanding of people. The supervisor then knows

that he must be aware of possible friction the employee may cause.

**A/M:** Are psychological tests used in ways other than for hiring or promoting?

**WITKIN:** When one company is acquired by another, often the acquired company's management is evaluated to learn of any personality conflicts or unharmonious management styles. Executive recruiters also use psychological evaluations. In addition, testing is used to help determine what went wrong when a productive employee begins having performance problems. And, if it is determined that employment must be terminated, testing plays a role in outplacement counseling.

**A/M:** How dependable are the results of these tests?

**WITKIN:** Any honest discussion of testing must begin with the admission that tests have been, and in some instances still are, misused. An employer might occasionally call another employer to learn what kind of tests are being used and then use them himself, whether or not they are job related. Or the employer might arbitrarily assume that a high score in any given factor is an advantage when actually it may be a disadvantage.

Recently, management is realizing that a test is no better than the psychologists who interpret the results. The psychologist comes with an understanding of what to test for (new knowledge of the importance of searching for weaknesses rather than strengths), new tests, new methods of validating tests, new testing formats, and better understanding of the role of tests in the overall selection procedure.

**A/M:** How do current tests differ from those that were given in the past?

**WITKIN:** Today's tests are more sophisticated and hence harder to falsify. The "forced choice" technique makes applicants choose between choices that appear equally desirable. The new, nonverbal tests improve psychologists' ability to separate independent thinkers from dependent thinkers; this factor is critical to success or failure in many jobs.

A/M: How do psychologists validate the tests they give?

WITKIN: Validation is a time-consuming process; yet psychologists are continually developing new methods of doing it. The two basic approaches to validation are Predictive validation and Concurrent validation. In Predictive validation, all new hires are tested. Once their performance has been evaluated, psychologists identify the test factors that are different for satisfactory and unsatisfactory performers. In Concurrent validation, the present work force is tested and the scores are related to job performance. Since current employers have benefited from experience and are already a select group, a statistical correction is made to their scores to provide base scores for applicants.

A/M: Are there any new developments in psychological testing for predicting job performance that we can look for?

WITKIN: Some new testing ap-

proaches currently under development are bio-data tests, assessment centers, and realistic job previews.

The bio-data test evaluates how well the candidate has performed. Typical questions are: How fast do you work compared with other people? How old were you when you first earned money? In essence, the candidate is rated on how he has fared in his milieu, rather than compared with an absolute standard. This, plus the fact that whites score about as well as blacks, makes the test bias-free. Applicants seem to be quite frank in their answers to this question: How would your former employer rate your performance? The question may provide more valuable data than one addressed to the former employer.

Many companies have organized what are called assessment centers, where psychologists and executives hold evaluation workshops lasting up to four days. Candidates are tested on how well they perform specific tasks that they will perform on the job. The testing is standardized

and controlled, though expensive. AT&T operates more than 70 of these centers, evaluating over 15,000 employees annually.

The realistic job preview test is based on the knowledge that employees who are realistic about the kind of work their job will require are better risks than those who are unrealistic. Accordingly, the test measures how realistic about the job they are. As an example, prospective airline stewardesses are asked if their work will most closely resemble that of a teacher, a nurse, or a waitress. Those choosing the last answer are the most realistic.

A/M: And, in conclusion . . .

WITKIN: I might conclude by saying successful prediction of performance depends upon the best use of all personnel procedures available. Testing is one of the possible procedures, and it is increasingly dependable because today it is being used as an integral part of the selection procedure—not the sole method of selecting.

## Testing And The Law

BY ARTHUR  
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Though users of testing generally understand that equal opportunity legislation does not discourage the use of proper testing procedures, a company's upper management may raise questions which test users should be prepared to answer. To begin, test users should understand how the Federal government came to be interested in testing and what are its current requirements.

The Federal government itself is largely responsible for the development of psychological testing. In both world wars it was faced with the task of evaluating enormous numbers of people, and it developed tests to meet this need. Following World War II, these millions of people applied for jobs with private industry.

"You couldn't possibly interview all of them," says Dr. Brad Chapman, chairman of the management and organizational behavior department of the University of Nebraska at Omaha. "So testing provided a minimum cutoff measure that could eliminate maybe 80 percent of the applicants." The use of testing continued to grow until the late 1960s when Willie Griggs and 12 other black workers at the Duke Power Co., in Draper, N.C., sued their employer with the charge of job discrimination under the Civil Rights Act of 1964.

The tests these workers had to pass to be promoted from floor sweepers to coal handlers were given to all employees, black and white, but they tended to exclude more blacks than whites. In 1971 the Supreme Court ruled that the tests did not measure an employee's ability to perform the job.

It is important to understand that the ruling was not against the use of tests. The court simply ruled that tests had to be "job related." As a result of the landmark case, the EEOC published guidelines on selection and testing in 1970 and republished them in 1976. A separate set of guidelines was published by the Justice Department, the Labor Department and the Civil Service Commission in 1976. This caused widespread confusion, but on December 30, 1977, uniform guidelines were published and adopted by all the agencies.

These *Uniform Guidelines on Employee Selection Procedures*, a 14,000-word document, require that any selection procedure (not only testing) which adversely affects members of any race, sex, or ethnic group must be shown to be job related through validation. The guidelines recommend that the American Psychological Association's Standards for Educational and Psychological Tests be the standards for validating tests.

Approved For Release 2001/08/10 : CIA-RDP00-01458R000100090004-9